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(54) Title: REMOVAL OF SODIUM OXALATE FROM A BAYER LIQUOR

(57) **Abstract:** The Bayer process uses hot sodium hydroxide solution to obtain pure alumina from bauxite ore. Alumina dissolves, and is then precipitated, and the remaining caustic Bayer liquor can be recycled for use again. However sodium oxalate tends to build up in the recycled liquor, and causes problems. By removing a stream of the liquor, treating it so as to be supersaturated with sodium oxalate, and then subjecting it to ultrasonic irradiation, crystal nuclei are formed. The resultant crystals can then be separated from the liquor. Surprisingly, other organic compounds in solution do not prevent this crystallisation process from being effective.



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